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10/805,031	03/19/2004	Daniel J. Zigmond	MSI-1899US	7958
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LEE & HAYES, PLLC 601 W. RIVERSIDE AVENUE SUITE 1400 SPOKANE, WA 99201			EXAMINER STRONCZER, RYAN S	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/805,031

Applicant(s)

ZIGMOND ET AL.

Examiner

Ryan Stronczer

Art Unit

2425

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-18, 20-25, 27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-18, 20-25, 27 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/808)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8-12, 25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al. (Pub. No.: US 2003/0093790, previously cited) and further in view of Safadi et al. (Pub. No.: US 2001/0051037) and Lees et al. (US Pat. No.: 7,162,499, previously cited).

As to amended claim 1, the rejection based on Logan set forth in the previous Office Action is incorporated herein. As previously analyzed, Logan teaches a PVR which records a program and associated metadata, can receive updated metadata related to the program after the program has concluded, and can use said updated metadata to delete portions of the recorded program. As to the amended limitation that "[the metadata] includes a scheduled program length and a timestamp indicating a unique version associated with the metadata," paragraph 0080 of Logan teaches the recited scheduled length and timestamp.

As to the following recited steps:

[3] receiving updated metadata associated with the live broadcast, wherein the updated metadata is generated by the data provider, indicates an exact program length and includes a timestamp indicating a unique version associated with the updated metadata

[4] replacing the previously recorded metadata with the updated metadata;

[5] if a length of the recorded live broadcast is greater than the exact program length, then deleting from the client device a portion of the recording that exceeds the exact program length,

Safadi, in an analogous art, teaches a personal video recorded (PVR) which records a broadcast program as well as metadata indicating the start and end time of said program [0020]. Safadi further teaches that after the program has concluded, the PVR can receive updated metadata from an EPG data server concerning the length of the program and can modify the recording to delete any unwanted portions not related to the recorded program [0061]. Specifically, Safadi teaches that the PVR can adjust the length of said recording after the recording has ended.

[T]his recording flexibility is accomplished by continually updating, in near-real-time, the data produced by the electronic programming guide server. This data is then used by the set-top terminal/personal versatile recorder unit (200) to determine the appropriate start and end times for the desired programs... according to this alternative embodiment, the agent application may control the duration of the event after the event has been recorded. In particular, a short time after recording the event, the agent application may use the updated, near-real-time data produced by the electronic programming guide server to accurately establish the times when the event has started and ended. By accurately establishing these times, the portion of the event that has been recorded before the event has started and after the event has ended is then deleted from the recording. [0061]

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Safadi into the system of Logan. Though Logan

teaches adding "running room" to a scheduling recording to ensure that the desired program is recorded in full, Logan does not explicitly teach a method for ascertaining the exact length of the desired program. It would have been desirable to incorporate add Safadi's method for automatically receiving updated metadata from the EPG server to ensure that the running time is accurate and that only unwanted portions of the recording are deleted. As to the recited timestamps and version numbers for the metadata, Fig. 2 and Col. 3, Line 66 through Col. 4, Line 5 of Lees, as cited in the two previous Office Actions, teaches the recited timestamps and version numbers. As previously analyzed, version numbers and timestamps taught by Lees would have been desirable in the system of Logan and Safadi so as to ensure that the user always had the most current version of the metadata.

As to claim 2, 0061 of Safadi teaches that the PVR can request updated metadata from the EPG server both during and after the recording of the program.

As to claim 3, paragraph 0113 of Logan teaches recording extra time past the scheduled end of a program ("running room") to ensure that *"every program has at least the entire rendition to it"* [0113]. Examiner further takes Official Notice that it is well known in the art for a DVR to allow a user to record extra time consistent with the running room taught by Logan to allow for live events--such as sports games--which may run longer than the scheduled time (e.g., if the game goes into overtime). It would have been obvious to one of ordinary skill in the art at the time of the invention that the user could have scheduled the running room to be any length he or she deemed necessary to ensure recording of the entire program. As to the limitation that "the

recording of the live broadcast continues for about 133% of the scheduled length," Applicant is advised that the limitation comprises functional language and does not serve to further limit the claimed apparatus (see *MPEP* § 2114 [R-1]).

As to claim 4, Logan, as cited in the previous Office Action, teaches that the user can receive updated metadata from a plurality of sources.

As to claim 5, Fig. 4 and 5 of Logan teach a user interface that can be displayed at the user's request. Fig. 5 shows the metadata associated with the content, in this case a list of segments of the program, a synopsis of the highlighted segment, and a status bar indicating the length of the program and the relative lengths of the segments. Given that Logan teaches receiving updated metadata for recorded content, it would have been obvious to one of ordinary skill in the art that the system could display updated segment titles, lengths, or synopsis according to the updated metadata.

As to claim 8, the rejection of claim 1 is incorporated herein. Both Logan and Lees, as cited above and in the two previous Office Actions, teach methods for determining which of two versions of metadata are more current. Safadi, as cited above, teaches the recited limitation "if the second updated metadata is more current than the previously received updated metadata, then replacing the previously received updated metadata with the second updated metadata."

As to claim 9, Lees teaches that the system can determine which of a plurality of sets of metadata is most current. If the previously received metadata is determined to be more current than the later-received metadata, it would have been obvious to one of ordinary skill in the art at the time of the invention to discard the later-received metadata

to ensure that the user always has access to the most current metadata available for recorded content.

As to claim 10, communicating the updated metadata to at least one client device is inherent in Safadi and Logan.

As to claim 11, Safadi explicitly teaches using the disclosed system to record an event with variable start and end times such as a sporting event [0011].

As to claim 12, the recited computer program and one or more computer-readable memories are inherent in the systems of Logan and Safadi.

As to claim 21, the rejection of claim 1 is incorporated herein. The recited processor, computer readable media, and computer program are inherent in the systems of Logan, Safadi, and Lees.

As to claim 25, the rejection of claims 1 and 21 are incorporated herein. The amended limitation that "the updated metadata is comprises information generated after a broadcast of the broadcast content is completed," is taught by 0061 Safadi as cited above. As to the recited "two-way communication interface coupled to the processor, wherein the communication interface is configured to receive updated metadata from a plurality of data providers coupled to the apparatus...and a modem coupled to the processor, wherein the modem comprises at least one of a Public Switched Telephone Network (PSTN) modem, a Digital Subscriber Line (DSL) modem, or a cable modem," Logan teaches: *"communication methods or apparatus used to transport metadata and/or content to the user as illustrated at 130 may take many different forms, including:*

the Internet, a dialup telephone connection through the public switched telephone network (PSTN)..." [0050].

As to the recited "and wherein the updated metadata is communicated using simple object access protocol (SOAP) messages transported using hypertext transfer protocol (http)," paragraph 0050 of Logan teaches that the updated metadata can be transmitted to the user via the Internet. Examiner takes Official Notice that the use of HTTP is notoriously well-known and widely practiced in the art for transmitting data over an Internet connection, such as that taught by Logan, and would it have been obvious to one of ordinary skill in the art at the time of the invention to use the HTTP protocol to transfer the metadata to Logan's client device. Examiner further takes Official Notice that SOAP is similarly well-known and widely-practiced in the art as a method for exchanging messages or data over an Internet application layer protocol such as HTTP and that it would have been obvious to one of ordinary skill in the art at the time of the invention to use the SOAP protocol to connect Logan's client device with the plurality of metadata sources via the Internet connection taught by Logan.

As to claim 27, the recited functionality is taught by fig. 3-5 of Logan.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al. and in view of Safadi et al. as applied to claim 1 above, and Knudson et al. (US Pat. No.: 6,536,041).

Though Safadi teaches updating the metadata for a sporting event ([0011]) and Logan teaches that the metadata for a sporting event can include a score or result (see,

e.g., [0355] or [0409]), they do not explicitly teach receiving updated metadata generated after the live broadcast is completed including a result of a sporting event, as recited. In an analogous art, Knudson teaches a system for updating the metadata of a live program such as a baseball game wherein "...*game recap information may be provided to the program guide. Game recap information may include game highlights or any other suitable game summary information... Event update information may include, for example, changes to the currently scheduled game time due to a weather delay*" (col. 18/lines 8-17). It would have been obvious to one of ordinary skill in the art at the time of the invention that the EPG server taught by 0061 of Safadi could be modified so as to receive the game recap information taught by Knudson so as to allow Safadi's users to receive more comprehensive metadata updates than just the running length of the program.

Claims 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barker et al. (Pub. No.: US 2002/0143976) and further in view of Lees et al., Kaars et al. (Pub. No.: US 2003/0056010), and Safadi et al.

As to claim 13, the rejection set forth in the previous Office Action is incorporated herein. As to the amended limitation of "receiving updated metadata associated with the program content at the content server, wherein the updated metadata comprises information generated after a broadcast of the program content is complete," paragraph 0061 of Safadi, as cited above, teaches an EPG server which receives updated metadata while a program is in progress and continues to receive updates after the

broadcast has been completed. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the EPG server of Safadi into the system of Barker to allow users to receive metadata updates after a program has ended to ensure that users always have access to the most current version of the metadata.

As to claim 14, the combination of Barker in view of Lees and Kaars, as analyzed in the previous Office Action provides a system in which the most current version from among a plurality of sets of metadata relating to the same object is selected. Though Kaars teaches that the original metadata is replaced with the most recently received set of metadata, in light of the teachings of Lees it would have been obvious to one of ordinary skill in the art at the time of the invention that the conflict resolution taught by Lees could be used to determine which set of metadata is most current and to replace the currently stored metadata in the metadata cache taught by Barker, if appropriate.

As to claim 15, Lees, as cited in the previous Office Action, teaches the metadata includes both a version number and a timestamp for determining which set is most current.

As to claims 16 and 17, the rejection of claim 13 set forth above and in the previous Office Action is incorporated herein. The system of Barker in view of Lees, Kaars, and Safadi, teaches the recited steps.

As to claim 18, Fig. 7 of Barker teaches the recited "requesting updated metadata associated with the program content periodically" at steps 720 and 730.

As to claim 19, Kaars, as cited in the previous Office Action, teaches that "...*the [old] metadata 456 may be outdated and needs to be replaced with the new metadata 789 comprising up-to-date information...*" [0022].

As to claim 20, the recited "computer readable memories" are inherent in the systems taught by Barker, Kaars, Lees, and Safadi.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Safadi and Lees as applied to claim 21 above, and further in view of Vasudevan et al. (US Pat. No.: 7,028,057).

Though Logan in view of Lees and Safadi, as analyzed above with respect to claim 21 teaches using timestamp and/or a version number to resolve a conflict between a plurality of sets of metadata, it does not explicitly teach displaying both sets of metadata simultaneously, as is recited in amended claim 22. In an analogous art, Fig. 5 and columns 6-7 of Vasudevan teaches resolving a conflict between multiple versions of a database. Vasudevan teaches a "*versioned relational database system includes auxiliary views 517 for showing conflicting rows on a merge operation, for showing locked rows, for showing differences between two versions, and for simultaneously showing data for multiple versions* [emphasis added]" (col. 7/lines 39-48). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the conflict resolution taught by Vasudevan into the systems of Logan, Safadi, and Lees so that a user could see the changes made between conflicting versions of metadata.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Safadi and Lees as applied to claim 21 above, and further in view of Marsh et al. (US 2004/0003403).

As cited previously, Logan teaches that the client can receive real-time metadata updates from a plurality of real-time data sources and Safadi teaches replacing existing metadata with updated metadata received from an EPG server; however, Logan and Safadi do not explicitly teach resolving conflicting information about the same program received from multiple sources. Marsh teaches an analogous system for receiving metadata updates from multiple sources in which:

Each piece of metadata is typically tagged with its source. This allows updates, but also allows stack ranking decisions to be made based on different provider trust levels for each metadata category. Each metadata provider is allocated a MSI [metadata source identifier]. The MSI numbers, and details of the different providers, together with their pecking order for the different metadata categories, are defined in a separate table. [0057]

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system taught by Logan and Safadi with the provider trust levels taught by Marsh to facilitate conflict resolution when receiving conflicting metadata for a particular program.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Safadi, Lees, and Marsh as applied to claim 21 above, and further in view of Knudson et al. (US Pat. No.: 6,536,041).

The rejection of claim 23 is incorporated herein. Though Logan in view of Safadi and Marsh teaches resolving conflicting sets of metadata using accuracy rankings, it does not explicitly teach deleting or discarding the obsolete metadata. In an analogous art, Knudson teaches a system for updating the metadata of a live program. Fig. 20-21 of Knudson teach deleting metadata updates from the system after they are determined to have "expired" or are obsolete. It would have been obvious to one of ordinary skill in the art at the time of the invention that the expiration and removal of obsolete metadata taught by Knudson could be incorporated in the system of Logan in view of Safadi, Lees, and Marsh, to remove metadata that is determined to be outdated or obsolete as analyzed above.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Safadi and Lees as applied to claim 25 above, and further in view of Barker et al.

Though Safadi teaches receiving updated metadata from an EPG server both during and after the broadcast of a program, it does not explicitly teach "requesting updated metadata associated with the broadcast content at regular intervals," as recited. In an analogous art, Barker teaches a system for compiling updated metadata for broadcast content. Fig. 7, steps 720 and 730 of Barker teach requesting updated metadata after a "polling interval" has expired. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Logan system with the

polling interval taught by Barker to prevent users from having to manually request updated metadata for their recorded programs.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Stronczer whose telephone number is (571) 270-3756. The examiner can normally be reached on 7:30 AM - 5:00 PM (EDT), Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian T. Pendleton can be reached on (571) 272-7527. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ryan Stronczer/
Examiner, Art Unit 2425

/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2425